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## **Site Observation Report**

## **GENERAL INFORMATION**

ENGINEER:	Greg Latreille, PE
DATE:	Oct 1, 2010
TIME:	10:30 am – 5 pm
PROJECT NO.:	205174
PROJECT NAME:	Noorvik Clinic

## **Current Status of Construction:**

Much of the structure has been constructed at this point. All foundation piling has been installed. The entire added first floor has been constructed. The mezzanine floor has been constructed. Most of the roof structure has been constructed. Roof and wall SIPs have been constructed for most of the structure. SIPs have not yet been applied to the underside of the floor structure. The renovations to the existing structure have not yet been done, including cutting new openings in one of the existing bearing walls and reinforcing the existing floor system for the resulting concentrated loads. Some of the existing floor SIPS have been removed for access, however. Some interior partitions have been erected, but GWB has not yet been applied.

The general appearance and condition of the site is excellent. BSI appears to be constructing the structure in accordance with the structural documents.

## Site Observation:

The site walk-through was performed with John Crittenden of Architects Alaska and with the help of George Evans with Bethel Services Inc. I found the building mostly in conformance with the structural drawings. I noted the following items:

I observed a mix of standard A325 High Strength Bolts and LeJeune twist-off type bolts in the visible structural steel connections. None of the LeJeune bolts had been tightened to the point of twisting off the tension-indicating stems. However, pretension is not required. The structural drawings call all connections out as "snug tight", which does not require these bolts to be twisted off, so the bolts are all okay as installed.



LeJeune Bolts – stems not twisted off



3x10 cut flush – reduced bearing area

• Near Grid D and plan east of Grid 5, 3x10 joists support the exterior deck at the first floor and frame into a C15 at the top of the drive-in ramp. This connection is detailed as 12/S5.2. I noted that the angled cut at the end of the 3x10 joist was not done. Instead, the

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joist was cut straight off at the edge of the C15 flange, largely reducing the bearing area of these joists. Due to the possibility of vehicle traffic in this area, a fix may be required and if so, will be forthcoming.

- George, John, and I discussed the detailing of roof corner post on the exterior deck, near
  grids E and 6. This post was recently moved plan west, and the base redetailed as 11/S5.6
  (SKS 37 re: RFI 70) in order to align this post with the building corner. It was determined
  that it would be beneficial architecturally to keep the column in its original location and add
  another post at the building corner in line with the first post. Connection details and other
  information on this condition will be forthcoming.
- Due to the under-floor condition encountered on-site at the original structure, it was
  determined that it will be excessively difficult to install the added floor trusses shown on
  S1.2 in the existing floor system to accommodate the concentrated loads at the new
  columns in the existing bearing wall. Several runs of piping cross this area perpendicular to
  the truss span. We will look into an alternative that can be installed without having to cut
  and reinstall all of the piping.
- There was a discrepancy between the existing deck and building locations shown on the original plans and what was encountered in the field. This resulted in a misalignment of the two portions of ramp landing plan north of Grid B and east of Grid 5. I did not see any structural issues with the current setup of this condition, in which the two bottom sections of ramp landing were simply not connected. Any proposed fix to realign these ramp landings should be coordinated with our office.



Ramp Landings Misaligned



Ramp Landings not connected – OK as constructed



Northeast Corner - Entrance Ramp



Southwest Corner

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